

[Manuals.plus](#) /

› [StarTech.com](#) /

› StarTech.com HDMI over CAT5 HDBaseT Extender ST121HDBTPW User Manual

StarTech.com ST121HDBTPW

StarTech.com HDMI over CAT5 HDBaseT Extender (ST121HDBTPW) User Manual

Model: ST121HDBTPW

PRODUCT OVERVIEW

The StarTech.com ST121HDBTPW is an HDMI over CAT5 HDBaseT Extender designed to transmit HDMI video and audio signals, along with power, over a single CAT5e or CAT6 cable. This extender supports Ultra HD 4K resolutions up to 115 feet (35 meters) and 1080p/1920x1200 resolutions up to 330 feet (100 meters). Its Power over Cable (PoC) feature allows the entire system to be powered from either the transmitter or receiver unit, simplifying installation in environments with limited power outlets.

Key features include:

- Extends HDMI and Power over Cable through one CAT5e or CAT6 cable using HDBaseT technology.
- Maintains 4K picture quality up to 115 ft. (35 m).
- Supports HD video resolutions (1920x1200 or 1080p) up to 330 ft. (100m).
- Includes mounting brackets for professional installation.

PACKAGE CONTENTS

Verify that your package contains the following items:

- 1 x HDMI Extender Transmitter Unit
- 1 x HDMI Extender Receiver Unit
- 1 x Universal Power Adapter
- 2 x Mounting Brackets
- 1 x Grounding Wire
- 1 x Instruction Manual



Image: The product packaging for the StarTech.com HDMI over CAT5 HDBaseT Extender, indicating the model number ST121HDBTPW and listing the included components.

SETUP INSTRUCTIONS

Follow these steps to set up your HDMI extender:

1. **Connect HDMI Source to Transmitter:** Connect an HDMI cable from your video source (e.g., computer, Blu-ray player) to the HDMI IN port on the Transmitter unit.
2. **Connect HDMI Display to Receiver:** Connect an HDMI cable from your display device (e.g., TV, monitor) to the HDMI OUT port on the Receiver unit.
3. **Connect Transmitter and Receiver with CAT Cable:** Use a single CAT5e or CAT6 Ethernet cable to connect the RJ45 port on the Transmitter unit to the RJ45 port on the Receiver unit. Ensure the cable is securely seated in both ports.
4. **Connect Power Adapter:** Connect the included universal power adapter to either the Transmitter unit or the Receiver unit. Due to the Power over Cable (PoC) feature, only one power adapter connection is required for both units to function.
5. **Power On Devices:** Power on your HDMI source and display devices. The extender units will automatically establish a connection.
6. **Optional Mounting:** Use the included mounting brackets to securely install the Transmitter and Receiver units in your desired location.



Image: A connection diagram illustrating how to connect the HDMI-enabled video source to the Transmitter (ST121HDBTPW), the Transmitter to the Receiver (ST121HDBTPW) via a 100m CAT cable, and the Receiver to the HDMI-enabled video display device. Mounting brackets are also shown.



Image: The StarTech.com HDMI Extender Transmitter and Receiver units, showing their compact black enclosures and status indicators.



Image: A close-up view of the HDMI input and output ports on the StarTech.com HDMI Extender units.



Image: A close-up view of the DC power input, RJ45 Ethernet port, and grounding screw on the StarTech.com HDMI Extender units.

OPERATING INSTRUCTIONS

Once the setup is complete and all devices are powered on, the HDMI extender will automatically begin transmitting the video and audio signal from your source to your display. The status LED on each unit indicates the operational status:

- **Solid Green:** Indicates a stable HDMI signal connection.
- **Flashing Green:** Indicates an active link but no HDMI signal, or a signal issue.
- **Off:** Indicates no power or no link between units.

Ensure that the resolution and refresh rate of your source device are compatible with your display and within the supported specifications of the extender for optimal performance.

MAINTENANCE

To ensure the longevity and optimal performance of your HDMI extender, consider the following maintenance guidelines:

- **Cleaning:** Gently wipe the units with a soft, dry cloth. Avoid using harsh chemicals or abrasive cleaners.
- **Ventilation:** Ensure the units are placed in a well-ventilated area to prevent overheating. Do not block any ventilation openings.
- **Cable Management:** Keep all cables neatly organized and avoid sharp bends or excessive tension, which can damage cables and connectors.
- **Environmental Conditions:** Operate the device within its specified temperature and humidity ranges.

TROUBLESHOOTING

If you encounter issues with your HDMI extender, refer to the following common troubleshooting steps:

- **No Video/Audio:**
 - Verify all HDMI and CAT cables are securely connected.
 - Ensure the power adapter is connected to either the Transmitter or Receiver unit and that the unit is receiving power (check status LED).
 - Confirm that the CAT5e/CAT6 cable length does not exceed the maximum supported distance (115 ft for 4K, 330 ft for 1080p).
 - Test with different HDMI cables or a different CAT5e/CAT6 cable.
 - Try connecting the HDMI source directly to the display to confirm they are functioning correctly.
 - Ensure the display is set to the correct HDMI input.
- **Poor Picture Quality (Flickering, Distortion):**
 - Check the quality of your CAT5e/CAT6 cable. A higher quality cable (e.g., CAT6 shielded) may improve performance, especially over longer distances or in environments with electromagnetic interference.
 - Reduce the resolution or refresh rate of the source device to see if the issue resolves.
 - Ensure the CAT cable is not running parallel to power lines or other sources of interference.
- **Status LED is Off:**
 - Check the power connection to the unit.
 - Ensure the power adapter is functional.

SPECIFICATIONS

Brand	StarTech.com
Model	ST121HDBTPW
Connector Type	HDMI
Video Resolution Support	Up to 4K (3840x2160) at 30Hz
Max Distance (4K)	115 ft (35 m) over CAT5e/CAT6
Max Distance (1080p/1920x1200)	330 ft (100 m) over CAT5e/CAT6
Power Over Cable (PoC)	Yes
Included Components	HDMI Extender (Transmitter & Receiver), Universal Power Adapter, Mounting Brackets, Grounding Wire
Item Weight	14.88 ounces
Color	Black

WARRANTY INFORMATION

This StarTech.com HDMI over CAT5 HDBaseT Extender (ST121HDBTPW) is backed by a **2-year StarTech.com warranty**. For detailed warranty terms and conditions, please refer to the official StarTech.com website or the documentation included with your product.

TECHNICAL SUPPORT

StarTech.com offers comprehensive technical support to assist you with any questions or issues you may encounter with your product. For free lifetime technical support, visit the official StarTech.com support page:

www.startech.com/support

You can also find product-specific information and resources by visiting: www.StarTech.com/Q/ST121HDBTPW

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

Open the live page

<https://manuals.plus/asin/B00HQBGR8>

More documents and user manuals: <https://manuals.plus/>